

ABSTRACT OF THE DISCLOSURE

5 A semiconductor integrated circuit is provided in which a negative voltage generation circuit capable of supplying a memory cell transistor substrate with a stable negative voltage, independently of the fluctuation of a power source voltage or environmental conditions and the process conditions etc., is realized easily, and in which the data holding time of a memory can be secured sufficiently, and the power consumption is reduced. A voltage detection part 1-B included in the negative voltage generation circuit is provided with a
10 constant voltage generation circuit 1-B1, a measuring voltage generation circuit 1-B3, which receives a constant voltage STDVOUT sent from the constant voltage generation circuit via a voltage supplying circuit 1-B2 and a negative voltage VBB sent from a negative voltage generation part and converts it into a measuring voltage REFV0 by resistors R1', R2', a first
15 comparator AMP12, which compares the measuring voltage sent from the measuring voltage generation circuit with ground voltage and outputs the result of comparison, and an output buffer circuit 1-B4', which amplifies the compared output from the first comparator and outputs it to the negative voltage generation part.

09852839-051001